

REMARKS

Reconsideration of the above-identified application in view of the following remarks is respectfully requested.

A. **Status of the Claims and Explanation of Amendments**

Claims 3-10, 15-22 and 24 are pending. Claims 3-10, 15-22 and 24 have been rejected under 35 U.S.C. §103(a) as being unpatentable over by Sannoh et al. (US Patent Application Publication No. 2003/0071908, herein "Sannoh") in view of Nozaki et al. (US Patent Application Publication No. 2004/0207743, herein "Nozaki") and further in view of Matsushita (U.S. Patent Application Publication No. 2005/0062856).

B. **Rejection to the Claims Under 35 U.S.C. §103(a)**

The rejections of claims 3-10, 15-22 and 24 are respectfully traversed. As explained more fully below, the requirements for such rejections are not met. In particular, the references do not teach disclose or suggest a unit configured to "detect, on the basis of a captured image of an object photographed based on pre light emission prior to a main light emission, an edge in the captured image of the object."

Applicant's claim 3 recites:

An image capturing apparatus comprising:

an area detection unit configured to detect, on the basis of a captured image of an object photographed based on pre light emission prior to a main light emission, an edge in the captured image of the object to determine an area occupied by a predetermined shape defined by the edge in the captured image of the object;

a light control area setting unit configured to set a light control area of a light emitting unit in the captured image in accordance with the area determined by said area detection unit;

an arithmetic unit configured to calculate a main light emitting amount in the main light emission in accordance with a photometry value based on the pre light emission in the light control area of the captured image of the object; and

a control unit configured to control to photograph the object in the main light emission by controlling the light emitting unit on the basis of the main light emitting amount calculated by said arithmetic unit.

Examiner admits that Sannoh does not teach, disclose or suggest the auto-exposure and face detection processing includes a pre-light emission operation and that a main light emitting amount is calculated in accordance with a photometry value based on a pre-light emission.” [02/02/2009 Office Action at p.4]. However this is not the only deficiency of Sannoh. Because Sannoh does not teach, disclose or suggest a pre-light emission operation and the calculation thereof, Sannoh cannot teach, disclose or suggest “a control unit configured to photograph the object...on the basis of the main light emitting amount calculated,” as further recited in claim 1. Sannoh’s CPU 115a cannot be configured to detect, calculate or control any of the items in the claims as this CPU 115a admittedly does not operate with pre-light emission. Thus, Sannoh cannot teach, disclose or suggest any of the purported configurations alluded to by the Examiner in the Office Action. [02/02/2009 Office Action at pp. 3-4].

Nozaki is unable to cure the deficiencies of Sannoh. Nozaki’s digital camera system performs a speedlight method whereby an emitting light quantity of a speedlight is set. See Nozaki, Fig. 9. Nozaki discloses in its step S258 that a pre-emitting mode emitting light prior to shooting in order to reduce red-eye. See *id.*, ¶ [0119]. Nozaki teaches that “[t]he pre-emitting mode is for determining the emitting light quantity of the speedlight upon actual

shooting on the basis of the reflected light from the face upon pre-emitting in addition to the reduction of red-eye described in step S258.” *See id.*, ¶ [0120]. But Nozaki’s speedlight method does not detect an edge in the captured image of the object to determine an area occupied by a predetermined shape defined by the edge of the captured image of the object on the basis of the pre-emitted light. Nozaki discloses that any such area determinations take place during set shooting condition 2 for AF/AE area. *See id.*, at ¶¶ [0111]-[0114]; Fig. 7, S221-S222. Nozaki’s AE/AF area determination cannot determine area occupied by a predetermined shape defined by the edge of a captured image of the object on the basis of pre-light emissions because Nozaki requires evaluating the luminance of the AE area before speedlighting (i.e. pre-light emission). As speedlighting is the only disclosed instance of pre-light emission taught in Nozaki and can only take place after the luminance of the AE area is evaluated, then Nozaki cannot teach, disclose or suggest that the determination operation of AE area is made based on any pre-light emission.

Matsushita’s disclosure cannot cure the deficiencies of Sannoh or Nozaki, either alone or in combination. Matsushita is concerned with correcting red-eye in subject images. *See* Matsushita, ¶ [0012]. In particular, Matsushita discloses the storage of files before and after automatic red-eye correction and detection whereby the correction step includes extracting a face region from a subject in the image and automatically detecting and modifying any detected red-eye. *See* Matsushita, ¶¶ [0030] - [0031]. Matsushita does disclose in the BACKGROUND OF THE INVENTION section that preliminary electronic flash firing has been used to reduce red-eye, but simultaneously discloses that “preliminary firing of an electronic flash cannot always prevent red-eye... .” *Id.* at ¶ [0007]. Thus, the objective of Matsushita to automatically correct red-eye would not necessarily be accomplished by use of firing a preliminary electronic flash. A

person skilled in the art would not be suggested to use preliminary firing of an electronic flash to automatically correct the red-eye detected using Matsushita's disclosed apparatus and method because it may not actually prevent red-eye at all. Further still, Matsushita's disclosure focuses on the storage of a subject image with and without red-eye. Matsushita actually teaches away from using such preliminary electronic flash image capture because there would be no pre-corrected image to be stored pursuant to Matsushita's disclosed objective. Instead, the teaching, suggestion and disclosure of Matsushita directs a person skilled in the art to use a red-eye processing method that allows storage of the information/file related to the image with detected red-eye and storage of a data related to an image with the red-eye corrected. See Matsushita, ¶¶ [0049]-[0051]; Figs. 2A-C. Use of a preliminary electronic flash prevents Matsushita from performing according to its invention disclosure.

As state above, Matsushita merely stores a red-eye corrected image, it does not disclose any area determination, any type of predetermined shapes defined by an edge and does not teach, disclose or suggest that any such determination of an area or predefined shape is based on pre-light emission (i.e., preliminary electronic flash).

Matsushita's single paragraph dedicated to preliminary electronic flash in the BACKGROUND section actually suggests that Matsushita's disclosure is meant to correct and therefore overcome the problems of this background technology. Matsushita would not incorporate the same background technology that it discloses is inadequate for the purposes of red-eye detection, correction and storage of the same. This single paragraph discussing preliminary electronic flash does not teach, disclose or suggest the detection operation of the claims and fails to support an obviousness rejection to those claims under 35 U.S.C. § 103(a).

Accordingly, as Applicant cannot find a unit configured to “detect, on the basis of a captured image of an object photographed based on pre light emission prior to a main light emission, an edge in the captured image of the object” of claim 3 in Sannoh, Nozaki and Matsushita, alone or in combination, at least independent claim 3 is asserted to be in condition for allowance. For at least similar reasons, similarly amended independent claim 15 and dependent claims 3-10, 16-22 and 24 are believed to be in condition for allowance as well.

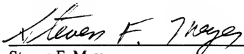
CONCLUSION

For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is requested. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 50-4827, ORDER NO. 1232-5691.

Respectfully submitted,
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